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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/982,496	10/18/2001	Ryszard Sprycha	C-411	7480
27384	7590	07/07/2006	EXAMINER	
NORRIS, MCLAUGHLIN & MARCUS, PA 875 THIRD AVENUE 18TH FLOOR NEW YORK, NY 10022			SHOSHO, CALLIE E	
			ART UNIT	PAPER NUMBER
			1714	

DATE MAILED: 07/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/982,496

Applicant(s)

SPRYCHA ET AL.

Examiner

Callie E. Shosho

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-15 and 17-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-15 and 17-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/28/06 has been entered.
2. All outstanding rejections are overcome by applicants' amendment filed 4/28/06.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claims 1, 3-15, and 17-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 15, 29, and 30 have each been amended to recite "hot-melt polyamide". The scope of the claims is confusing because it is not clear what is meant by "hot-melt polyamide" and what types of polyamide this phrase encompasses or how "hot-melt polyamide" differs from other polyamide. Clarification is requested.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1, 3-8, 15-22, and 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Catena et al. (U.S. 5,338,785) in view of EP 621319 and Kuder et al. (U.S. 6,013,373).

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Attention is called to example 7 of Catena et al. that disclose ink comprising polyamide, n-propanol, and pigment, i.e. phthalocyanine blue. The polyamide is known under the tradename Macromelt 6239 which is well known, as disclosed in Kuder et al. (col.4, lines 48-61), as a hot-melt polyamide.

The difference between Catena et al. and the present claimed invention is the requirement in the claims of water-soluble compound.

EP 621319, which is drawn to gravure ink as is Catena et al., disclose the use of potassium hydroxide, lithium hydroxide, or sodium hydroxide in ink comprising phthalocyanine in order to produce ink with excellent fluidity and stability with time as compared to conventional ink comprising phthalocyanine alone. It is disclosed that the hydroxide is used in amount of 0.1-10 parts per 100 parts phthalocyanine (page 1, lines 3-7, page 3, lines 3-6 and 44-50, page 4, lines 30-36, and page 5, lines 19-24).

In light of the motivation for using water-soluble compound disclosed by EP 621319 as described above, it therefore would have been obvious to one of ordinary skill in the art to use such potassium hydroxide, lithium hydroxide, or sodium hydroxide in the ink of Catena et al. in order to produce ink with excellent fluidity and stability with time, and thereby arrive at the claimed invention.

8. Claims 1, 4-8, 15, 18-22, and 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhu et al. (U.S. 6,251,175) alone or, alternatively, in view of Smith et al. (U.S. 5,095,058).

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Zhu et al. discloses non-aqueous ink comprising polyamide, solvent such as ethanol, up to 2% ammonium hydroxide, and pigment (col.3, lines 9-10, 13, and 30, col.4, line 10, col.5, line 34, and col.7, lines 22 and 28-30).

The difference between Zhu et al. and the present claimed invention is the requirement in the claims of specific type of polyamide.

On the one hand, given the broad disclosure of “polyamide resin” in Zhu et al., it would have been obvious to one of ordinary skill in the art, absent evidence to the contrary, to choose any type of polyamide, including hot-melt polyamide as presently claimed, depending on the desired properties of the ink.

On the other hand, Smith et al. disclose the use of hot-melt polyamide as binder in ink in order to impart toughness, flexibility, and adhesion (col.1, lines 57-65).

Although there is no disclosure that using ammonium hydroxide in the ink results in increase in stability and resolubility of the ink, given that Zhu et al. either alone or, alternatively, in combination with Smith et al. disclose ink identical as presently claimed including base as presently claimed, it is clear that the use of ammonium hydroxide in the ink would intrinsically result in increase in stability and resolubility.

In light of the above, it therefore would have been obvious to one of ordinary skill in the art to either choose polyamide, including hot-melt polyamide as presently claimed, from Zhu et al. depending on the desired properties of the ink or, alternatively, in light of the motivation for using hot-melt polyamide disclosed by Smith et al. as described above, it would have been obvious to one of ordinary skill in the art to use hot-melt polyamide in the ink of Zhu in order to

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produce ink with toughness, flexibility, and adhesion, and thereby arrive at the claimed invention.

9. Claims 1, 3-8, 15, 17-22, and 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 621319 alone or, alternatively, in view of Smith et al. (U.S. 5,095,058).

EP 621319 discloses non-aqueous ink jet ink comprising polyamide, pigment such as phthalocyanine, organic solvent including alcohol such as isopropanol or ethanol; and 0.1-10% inorganic base such as sodium hydroxide or potassium hydroxide (page 1, lines 3-8, page 3, lines 1-6 and 44-50, page 4, lines 17-18, 20, 24-25, and 30-36, page 6, lines 1-23, and example 3).

The difference between EP 621319 and the present claimed invention is the requirement in the claims of specific type of polyamide.

On the one hand, given the broad disclosure of “polyamide resin” in EP 621319, it would have been obvious to one of ordinary skill in the art, absent evidence to the contrary, to choose any type of polyamide, including hot-melt polyamide as presently claimed, depending on the desired properties of the ink.

On the other hand, Smith et al. disclose the use of hot-melt polyamide as binder in ink in order to impart toughness, flexibility, and adhesion (col.1, lines 57-65).

Although there is no disclosure that using sodium hydroxide or potassium hydroxide in the ink results in increase in stability and resolubility of the ink, given that EP 621319 either alone or, alternatively, in combination with Smith et al. disclose ink identical as presently claimed including base as presently claimed, it is clear that the use of sodium hydroxide or potassium hydroxide in the ink will intrinsically result in increase in stability and resolubility.

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In light of the above, it therefore would have been obvious to one of ordinary skill in the art to either choose polyamide, including hot-melt polyamide as presently claimed, from EP 621319 depending on the desired properties of the ink or, alternatively, in light of the motivation for using hot-melt polyamide disclosed by Smith et al. as described above, it would have been obvious to one of ordinary skill in the art to use hot-melt polyamide in the ink of EP 621319 in order to produce ink with toughness, flexibility, and adhesion, and thereby arrive at the claimed invention.

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Findlay et al. (U.S. 4,490,430) disclose ink comprising hot-melt polyamide, pigment, and n-propanol, however, there is no disclosure or suggestion of water-soluble compound as required in all the present claims.

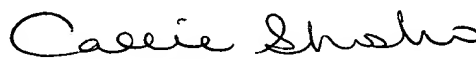
El-Hefnawi et al. (U.S. 5,183,847) disclose ink comprising hot-melt polyamide, solvent, and pigment, however, the water is aqueous-based not non-aqueous as presently claimed.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie E. Shosho whose telephone number is 571-272-1123. The examiner can normally be reached on Monday-Friday (6:30-4:00) Alternate Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Callie E. Shosho
Primary Examiner
Art Unit 1714

CS
6/30/06